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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,803	05/04/2001	Ari Hourunranta	460-010342-US(PAR)	8891

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PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER

PHILIPPE, GIMS S

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 06/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,803

Applicant(s)

HOURUNRANTA, ARI

Examiner

Gims S Philippe

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 25-47 and 53-66 is/are rejected.
- 7) ☒ Claim(s) 20-24, 44 and 48-52 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 2613

DETAILED ACTION

This is a first action in response to application no. 09/849,803 filed on May 4th 2001 in which claims 1-66 are presented for examination.

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a

Art Unit: 2613

nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Abstract

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because of the phrase "*the invention relates*".

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2613

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 5, 25-31, and 54-66 are rejected under 35 U.S.C. 102(e) as being anticipated by Karczewicz et al. (US Patent no. 6,735,249).

Regarding claims 1, 31, 55-59, 61, and 64, Karczewicz discloses a system, apparatus and method for detecting errors in an image signal in which the image signal is produced by dividing an image into blocks (See Karczewicz col. 8, lines 12-20, col. 10, lines 60-65, col. 5, lines 55-63), and a coding stage is performed in which at least predictive coding is performed on an image block to produce inter-coded image information for the image block (See Karczewicz col. 3, lines 58-67), the inter-coded image information comprising at least one prediction error block containing prediction error information contained in the at least one prediction error block (See Karczewicz fig. 1, items 42 and 54, and col. 12, lines 6-11), wherein a prediction error block check is performed in which prediction error information contained in the at least one prediction error block is examined to detect errors in the inter-coded image information for the image block (See Karczewicz col. 12, lines 1-22).

Art Unit: 2613

Regarding claims 30, 54, 60, 62, 63 and 65-66, most of the limitations of these claims have been noted in the above rejection of claims 1, 31, 55, 61, and 64. In addition, Karczewicz further suggests using luminance prediction error block and a chrominance prediction error block to obtain prediction error information relating to a luminance or chrominance component of the image signal (See Karczewicz col. 20, lines 35-41).

Regarding claim 5, most of the limitations of these claims have been noted in the above rejection of claims 1, 31, 55, 61, and 64. In addition, Karczewicz further suggests using luminance prediction error block and a chrominance prediction error block to obtain prediction error information relating to a luminance or chrominance component of the image signal (See Karczewicz col. 20, lines 35-41).

As per claim 25, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Karczewicz further discloses prediction error information comprising pixel error values and a discrete cosine transform is applied to the pixel error value of the coding stage in order to form spatial frequency domain prediction error coefficients, wherein an inverse discrete cosine transform is applied to the spatial frequency domain prediction error coefficients to the prediction error block check (See Karczewicz fig. 1, items 42, 46, 54 and 36, and col. 13, lines 48-54, and col. 15, lines 20-38).

Art Unit: 2613

As per claims 26-27, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, variable length coding is considered present in Karczewicz's encoding unit of fig. 2, and col. 20, lines 7-15.

As per claims 28-29, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Karczewicz provides first and second terminals for performing coding and decoding respectively (See Karczewicz figs. 1, and 2-3).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4, 6-19, 32-43, 45-48, 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karczewicz (US Patent no. 6,735,249) in view of Uenoyama et al. (US Patent no. 6,421,385).

Regarding claims 2-4, 6-19, 32-43, and 46-47, most of the limitations of these claims have been noted in the above rejection of claims 1, 5, and 31.

It is noted that although Karczewicz discloses a reference value produced on the basis of prediction error, and wherein the prediction values relate to luminance and

Art Unit: 2613

chrominance components of the image (See Karczewicz col. 8, lines 9-11, 34-38, col. 12, lines 6-11, and col. 20, lines 35-41), it is silent about comparing the reference value to a value range wherein based on the result of such comparison the inter-coded image will be considered to contain error as specified in claims 2-13.

However, Uenoyama et al. discloses a method for detecting errors wherein a reference value is calculated to a value range wherein based on the result of such comparison the inter-coded image will be considered to contain error (See Uenoyama col. 7, lines 29-41, and col. 20, lines 1-29).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Karczewicz's error detector by incorporating Uenoyama's step of calculating a reference value to a value range wherein based on the result of such comparison the inter-coded image will be considered to contain error. The motivation for performing such a modification in Karczewicz is to provide an image free of quality deterioration in a finally reproduced image as taught by Uenoyama (See Uenoyama col. 11, lines 47-67 and col. 12, lines 1-23).

As per claim 45, Karczewicz further discloses storing the reference value in memory (See Karczewicz col. 11, lines 53-59).

As per claim 53, Karczewicz further discloses a wireless terminal (See col. 2, lines 26-29).

Art Unit: 2613

6. Claims 20-24, 44, 48-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamaguchi et al. (US Patent no. 5737022) teaches motion picture error concealment using simplified motion compensation.

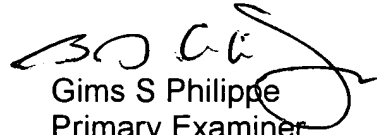
Matsumura et al. (US Patent no. 6489996) teaches moving picture decoding method and apparatus calculating motion vectors to reduce distortion caused by error propagation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S Philippe whose telephone number is (703) 305-1107. The examiner can normally be reached on M-F (9:30-7:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on (703) 305-4780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gims S Philippe
Primary Examiner
Art Unit 2613

GSP

June 17, 2004